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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/076,270	02/19/2002	Robert Kopetzky	076326-0228	1060

22428 7590 03/06/2003

FOLEY AND LARDNER
SUITE 500
3000 K STREET NW
WASHINGTON, DC 20007

EXAMINER

HAUGLAND, SCOTT J

ART UNIT	PAPER NUMBER
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3654

DATE MAILED: 03/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicant(s)

10/076,270

Applicant(s)

KOPETZKY ET AL.

Examiner

Scott Haugland

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 11-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120.

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the belt winding reel recited in claim 11, line 1 and the wound drive band required by claims 11 and 20 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

Claim 20 is objected to because of the following informalities: The claim does not end with a period. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 11-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The language "the drive chamber is adapted to be exposed from one side" in claim 11, line 7 and claim 20, lines 6-7 is unclear. These claims have been interpreted as requiring the chamber to be exposed to expanding gas in its interior only.

The language of claim 11, lines 11-12 and claim 20, line 10 appears inaccurate since the disclosed interface is between edges, not ends, of the band and the plates.

In claim 20, line 2, "the drive" lacks antecedent basis.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11 and 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mitzkus, et al in view of Wier.

Mitzkus, et al discloses a safety belt tensioner drive unit comprising a drive shaft coupled to belt winding reel and capable of being triggered, a drive chamber formed by two connected plates 51, 52 which extend parallel to one another, drive bands 21 having ends fastened to the drive shaft and wound on the drive shaft, and a gas

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generator responsive to an acceleration sensor. Exposure of the chamber and band to pressurized gas from the gas generator causes the drive band to unwind and drive the drive shaft.

Mitzkus, et al does not disclose a coating material on the facing sides of the plates.

Wier teaches providing a coating (wax or other material – see column 6, lines 1-6) on one of engaging relatively moving surfaces that define an enclosed chamber for containing pressurized gas which drives a safety belt tensioner to reduce gas loss from the chamber. The coating of Wier is seen to be a film.

It would have been obvious to one having ordinary skill in the art to provide Mitzkus, et al with a film of coating material such as wax between the plates and band as taught by Wier to enhance gas retention in the drive chamber. It would have been obvious to include the coating material on the plates forming the chamber to ensure adequate material to maintain the desired seal throughout the range of motion of the band. With regard to claim 14, it would have been obvious to provide a coating of varying thickness as taught by Wier to accommodate variations in spacing and thickness of the plates. With regard to claim 16 and 17, the materials taught by Wier are seen to be soft and have adhesive properties. With regard to claims 18 and 19, the band would inherently penetrate and remove some of the coating material if the soft coating material were placed to bridge the gap between the band and plates as taught by Wier.

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Claims 12 and 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Mitzkus, et al in view of Wier as applied to claim 11 above, and further in view of Stephens, et al.

Mitzkus, et al does not disclose a plurality of layers of coating material on the plates forming the drive chamber.

Stephens, et al teaches providing a plurality of layers of coating material on a machine element to form a seal. Note column 4, lines 66-69.

It would have been obvious to one having ordinary skill in the art to provide a plurality of layers of coating material on the plates of Mitzkus, et al as taught by Stephens, et al to form a seal with the band. With regard to claim 13, it would have been obvious to provide an additional layer of a different material such as a lubricant on the plates to reduce friction between the plates and band as is old and well known.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bauer is cited to show a safety belt tensioning device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Haugland whose telephone number is (703) 305-6498. The examiner can normally be reached on Monday - Thursday and every second Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on (703) 308-2688. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

AJH

SJH

February 27, 2003

Kathy Matecki

KATHY MATECKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600